# Michigan Senior Mobility Action Plan



# **Governor's Traffic Safety Advisory Commission**

# Member agencies:

Michigan Department of Transportation
Michigan Office of Highway Safety Planning
Michigan Department of State
Michigan Department of State Police
Michigan Office of Services to the Aging
Michigan Department of Education
Michigan Department of Community Health

April 2006

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# **National Background**

In 1998, the American Association of State Highway and Transportation Officials (AASHTO) approved its Strategic Highway Safety Plan, which was developed by the AASHTO Standing Committee for Highway Traffic Safety with the assistance of the Federal Highway Administration, the National Highway Traffic Safety Administration (NHTSA), and the Transportation Research Board Committee (TRB) on Transportation Safety Management. The plan includes strategies in 22 key emphasis areas that affect highway safety. The plan's goal is to reduce the annual number of highway deaths by 5,000 to 7,000. Each of the 22 emphasis areas includes strategies and an outline of what is needed to implement each strategy.

The National Cooperative Highway Research Program (NCHRP) Project 17-18(3) is developing a series of guides to assist state and local agencies in reducing injuries and fatalities in targeted areas. The guides correspond to the emphasis areas outlined in the AASHTO Strategic Highway Safety Plan. Each guide includes a brief introduction, a general description of the problem, the strategies/countermeasures to address the problem, and a model implementation process. NCHRP report 500: Volume 9 is "A Guide for reducing collisions involving older drivers" is one of the guides the Senior Mobility Work Group used as a resource. http://safety.transporation.org/guides.aspx

# Michigan Background

In 1998, the Southeast Michigan Council of Governments (SEMCOG), with funding from the Michigan Office of Highway Safety Planning (MOHSP), convened a statewide, interdisciplinary Elderly Mobility & Safety Task Force. This task force went on to create and have approved in August 1999 by the Michigan State Safety Commission the "Final Plan of Action, Elderly Mobility and Safety – The Michigan Approach". This document can be accessed at: <a href="http://www.semcog.org">http://www.semcog.org</a>

The 1999 Final Plan of Action created a framework for continuing activity by the state agencies in furthering the cause of elderly mobility in Michigan, which was partly monitored and promoted by the continuing meeting of the task force.

The most notable achievement of this task force was the planning and conduct of the National Conference on Elderly Mobility, held in Detroit in September 2004. At this conference, best practices from around the world were identified and shared in the fields of roadway design, alternative transportation, education and training, housing and land use, and driver screening and assessment. As the conference's engineering highlight, the Michigan Department of Transportation (MDOT) developed a "senior driver showcase roadway" in which signs, signals, and markings were modified on a 7.4 mile loop of freeway and arterial road system in Detroit.

In early 2002, the Michigan overall safety effort was re-organized, with the creation of the Governor's Traffic Safety Advisory Commission (GTSAC). Eventually, the existing Elderly Mobility & Safety Task Force assumed the role of advisory committee to this new overall safety

body. The task force membership was kept intact, but the name of the group was changed to "Senior Mobility Work Group" to reflect its advisory status to the GTSAC.

# **Action Plan Development**

Senior Mobility issues were identified as an emphasis area in both the AASHTO and GTSAC Strategic Highway Safety Plans. The Senior Mobility Work Group, in its advisory capacity to the GTSAC, developed this Michigan Senior Mobility Action Plan. Issues and strategies from the national and prior (1999) state plans were carried forward into the Michigan plan, as well as other issues and strategies not specifically mentioned in either plan.

The Issue: Senior Mobility

# Background

In 2003, there were 930,000 older licensed drivers in Michigan, representing 14.4% of all licensed Michigan drivers. The number of older licensed drivers in Michigan has increased 29% in the past 10 years while the total number of Michigan drivers has increased only five percent.

While the data show that most older drivers are quite responsible (e.g. have high safety belt usage, lower alcohol-related crash rates), national fatality rates per 100M VMT for the oldest drivers mirror the high rates for teen drivers. Plus, the inherent frailty of older drivers reduces their chances of surviving a crash, once it occurs. Current crash data show that older drivers were involved in only 11% of total Michigan crashes in 2003, but in 20% of the fatal Michigan crashes. If current fatality rates remain unchanged, the growth in the number of older drivers will lead to a tripling of traffic deaths among those over age 65 by 2030.

The population of the United States is aging – its older population will double over the next 30 years. By 2030, one in five Americans will be 65 or older. In Michigan, those numbers are not much different. In 1970, only 9% of the population was considered elderly (age 65 and above). By 2020, that number is expected to grow to 17%. As the number of older people continues to increase, important issues affecting this population segment need to be addressed. One such issue is preserving the mobility and enhancing the safety of seniors. According to national transportation survey data, 90% of trips taken by older adults are by personal vehicle. Of that 90%, 70% involved an older adult driving the vehicle.

How safe are older drivers? The answer depends upon how "safety" is measured. On a licensed-driver basis, older adults are among the safest on the road. The real safety concern for older drivers arises when one takes into consideration their increased likelihood of being injured or killed in a crash.

	Total Population	Male Population	Female Population	Elderly Male Population Age 65+	Elderly Female Population Age 65+	Elderly Male Population Age 85+	Elderly Male Population Age 85+
USA	281,421,906	137,916,186	143,505,720	14,382,370	20,596,602	1,203,376	2,957,185
MI	9,938,444	4,871,161	5,067,283	500,489	718,743	39,882	101,015

Michigan already has an extensive senior transportation network. Every county has some form of senior transportation service. Over 465 agencies provide transportation to Michigan's citizens, many of them serving only seniors. They include public transit providers, which provide almost three-quarters of Michigan's senior transportation trips, specialized service agencies, volunteer driver services, all focused on keeping Michigan's aging population mobile. There also are a number of very innovative programs across the state demonstrating daily that senior transportation can be successfully delivered.

# **Michigan Senior Mobility Goals**

The goals of this Senior Mobility Action Plan are to reduce the number and severity of crashes involving senior drivers and pedestrians; to increase the scope and effectiveness of alternative transportation options available to seniors; to assist seniors in maintaining safe mobility for as long as possible; and to plan for a day when driving may no longer be possible.

Specific goals are as follows:

# Crash Reduction Goals:

Due to advances in medicine and lifestyle as well as the demographics of the baby boomer phenomenon, the number of senior drivers and the miles traveled will increase every year. Therefore, absent any intervention, the reasonable expectation is that senior crashes, including severe crashes, will increase every year. Given that discussion, any crash reduction in this subgroup of driving population – even holding the line on crashes – would be an improved outcome over current expectations.

We propose the following crash reduction goals for Michigan by 2010:

- Number of senior driver crashes < 40,000
- Number of K and A injuries resulting from senior driver crashes < 1,400
- Number of fatalities resulting from senior driver crashes < 200
- Ratio of senior driver crashes to total crashes remain in 10-11% range

Year	Senior Driver Crashes	K+A Injuries Resulting from Senior Driver Crashes	Fatalities Resulting from Senior Driver Crashes	Percent of senior driver KA crashes to total KA crashes	Percent of senior driver crashes to total crashes
1999	44771	1993	285	1457/11206=13.0	44771/415675=10.8
2000	44169	1760	262	1341/10438=12.8	44169/424852=10.4
2001	42587	1522	264	1180/9388=12.6	42587/400813=10.6
2002	42197	1664	241	1277/9421=13.6	42197/395515=10.7
2003	42329	1504	268	1188/8977=13.2	42329/391845=10.8
2004	41372	1521	234	1191/8445=14.1	41372/373028=11.1

<sup>\* &</sup>quot;K" injury is a death; "A" injury is an incapacitating injury.

A senior crash is any crash involving a driver, pedestrian or cyclist over 65 years of age.

Source: Crash Facts and University of Michigan Transportation Research Institute.

# Michigan Senior Mobility: Issues, Strategies, Accomplishments, and Near Term Action Plan

By Category





#### PLANNING/ADMINISTRATION

#### Goals and Issues:

1. Plan for an aging population.

### Strategies:

- 1. Maintain a multi-disciplinary/multi-agency safety task group within the state to address senior mobility issues which will
  - Identify current activities by various groups or individuals.
  - Establish communication systems to share information and data.
- 2. Assist the elderly in planning for their future mobility, when driving is no longer an option.

# Accomplishments:

- 1. Michigan was one of the first states in the nation to consider senior mobility as an emerging issue. The initial work group was created in 1997, and is now identified as the Senior Mobility Work Group.
- 2. The GTSAC hosted the North American Conference on Elderly Mobility in September 2004. It was considered a successful conference attended by 17 states and 7 countries. The conference resulted in national recognition of Michigan as a leader in senior mobility.

- 1. The GTSAC will continue to convene the Senior Mobility Work Group to seek out and identify opportunities to improve senior mobility and transportation safety.
- 2. The GTSAC, working through the Senior Mobility Work Group and constituent agencies, will participate in the strategic AASHTO Lead State Initiative in Senior Mobility. This initiative will require Michigan agencies to consider for implementation in Michigan, all strategies listed in "NCHRP Report 500, Volume 9: A Guide for Reducing Collisions Involving Older Drivers"; plan to implement those strategies that can be implemented; and report to the rest of the nation on results of this strategic planning approach.

### RESEARCH

# Goals and Issues:

Reliable data is not always available to describe the scope of older driver mobility issues.

# Strategies:

- 1. Identify current activities and research statewide by various groups or individuals.
- 2. Investigate crash data to learn more about location, nature and scope of crashes involving senior drivers.
- 3. Investigate alternative transportation needs and issues, particularly gaps between service needed and service provided within Michigan.
- 4. Establish communication systems to share information and data through the Senior Mobility Work Group.
- 5. Support research on mobility options.
- 6. Evaluate the effectiveness of existing Michigan senior-related programs. (e.g., TIA and SDAP)

# Accomplishments:

1. OSA held public forums on Important Aging Topics in 2005 and prepared and published a report titled: "Public Input on Creating A Policy Agenda for Aging in Michigan". Part of this report dealt with the transportation options of seniors in Michigan.

# Near-term Action Plan:

OSA will publicize the Michigan's Senior Transportation Network: An Analysis of Transportation Services for Older Adults in Michigan report in November 2005.

### **EDUCATION AND AWARENESS**

#### Goals and Issues:

- 1. Improve the driving competency of older adults in the general driving population.
- 2. More fully understand both the impacts of mobility on health medical, emotional and psychological and the impact of health on mobility.

#### Strategies:

- 1. Provide educational and training opportunities to the general older driver population.
- 2. Reduce the risk of injury and death to older drivers and passengers involved in crashes.
- 3. Establish resource centers within communities to promote safe mobility choices.
- 4. Increase seatbelt use by older drivers and passengers.
- 5. Improve the process of identification, evaluation and intervention of drivers with dementia, or other aging related functional limitations.
- 6. Develop guidelines for physicians and other health care providers for identifying and evaluating driving impairments.
- 7. Develop and disseminate referral guidelines to assist health care providers in meeting the mobility needs of their patients.
- 8. Develop educational materials for the elderly and their families and care givers as well as professionals (e.g., traffic engineers and alternative transportation providers) to assist in understanding the implications of aging on mobility.
- 9. Initiate physician immunity legislation.

# **Accomplishments:**

- 1. The Michigan Department of State has made available in its branch offices the following information:
  - AARP literature promoting their driver safety programs
  - 'You Decide: Senior Driving Awareness Program' sponsored by the Area Agency on Aging 1-B (AAA1-B).
  - "Driving for Life a Guide for Older Drivers and their Families" developed by the Department of State
- 2. The American Automobile Association (AAA) Foundation distributes the brochure 'A Guide for Families and Friends Concerned about an Older Driver'.
- 3. At the request of the senior mobility work group, and following the success of the NACEM, the editors of The *Public Roads* magazine agreed to publish a series of articles on senior mobility.
- 4. AAA has developed and distributed its Roadwise Review CD.
- 5. The Department of State has established relationships with rehabilitation agencies for senior drivers that seek rehabilitative training due to a medical condition for the continuation of safe driving privileges.
- 6. THE SDAP is designed to assist with the physiological ramifications of driving cessation the idea that driving is a symbol of independence, and that loss can be difficult emotionally as well as practically.

- 1. AAA 1-B will continue to distribute educational materials that educate the family unit, care givers and professionals on senior mobility issues. Money is being sought to continue this effort.
- 2. AARP will continue to provide the Driver Safety Program.

- 3. The Transportation Improvement Association of Oakland County will continue offering Mature Driver workshops (approximately 25 per year).
- 4. The Michigan Department of State will continue to utilize the mobile office to offer services to the senior population.
- 5. The Senior Mobility Work Group and FHWA will investigate the possibility of continuing the articles on Senior Mobility in the *Public Roads* magazine, beyond those currently planned.
- 6. The Senior Mobility Work Group will explore a resource center/web site that is a clearing house of information on senior mobility at a local level.
- 7. Explore a web site that houses a clearing house of information on senior mobility.
- 8. The Michigan Department of State will continue its outreach to senior agencies educating them on safe driving practices and services available with Power Point presentations.

# ENGINEERING COUNTERMEASURES

#### Goals and Issues:

- 1. Improve the roadway and driving environment to better accommodate the special needs of older drivers and pedestrians.
- 2. Provide remedial assistance to help functionally impaired older drivers lower their crash risk.

#### Strategies:

- 1. Review and update the 1999 Elderly Mobility and Safety The Michigan Approach Final Plan of Action
- 2. Adopt what is replicable in Michigan from the NCHRP report 500 Volume 9
- 3. Review and adopt what is replicable from the Older Driver Highway Design Handbook.

# **Accomplishments:**

- 1. AAA Road Improvement Demonstration Project.
- 2. MDOT's adopted the use of 6 inch edge lines on all of its roadways
- 3. MDOT adopted the use of Clearview font lettering, and prismatic lettering on high intensity green background for all its freeway guide signs.
- 4. MDOT adopted the box span design as their preferred method for signal installation.
- 5. MDOT developed the senior showcase roadway which remains in place. This showcase features seven miles of roadway with side by side comparisons of sign sheeting and font, signals, and pavement markings.

- 1. MDOT and FHWA will continue to make power point presentations to local and statewide audiences on engineering enhancements to show the benefits of recommendations for the elderly driver and pedestrian.
- 2. MDOT will systematically review the collected best practices and make appropriate changes to MDOT statewide practices.
- 3. MDOT will investigate the use of back plates with box span signal installations at locations with high crashes.

#### ALTERNATIVE TRANSPORTATION

#### Goals and Issues:

1. Line-haul, fixed-route service, para transit or demand responsive services, private/volunteer resources, rural transportation, and coordination and collaboration.

# Strategies:

- 1. Study best practices and investigate replicating successful alternative transportation programs from other locations such as:
  - Ann Arbor Transit Authority (AATA): Good as gold, Senior Ride, and Night Ride (service delivery model)
  - Detroit EZ Ride (urban service delivery model)
  - Assisted Senior Transportation volunteer Handbook, Wichita, KS (volunteer training model)
  - Yates Dial-a-Ride, Idlewild, MI (rural service delivery strategy)
  - The Rapid (Grand Rapids) Travel Training Service (consumer education model)
  - Independent Transportation Network, Portland, ME (self supported community model)
  - Missouri rural transportation marketing program (statewide education/awareness model)
- 2. Promote and support existing local transportation coordination efforts such as:
  - Local Coordination Committees and Local Advisory councils
  - Local/Regional transportation brokerage activities
  - Federal United We Ride Coordination Initiative
- 3. Promote customer information and education on the use of alternative transportation resources such as:
  - Information Brokerage Model, Sedgewick County, KS
  - SMART Transportation Resources Manual
  - Specialized Transportation Services Referral Manual (SEMCOG)

# Accomplishments:

- 1. At the North American Conference on Elderly Mobility, the best practices in alternative transportation from around the country and internationally were promoted and reviewed.
- 2. DCH developed and is currently piloting the voucher transportation program in seven communities statewide.
- 3. MDOT as part of the United We Ride Initiative conducted six regional communication forums on improving human service transportation coordination.
- 4. The Department of State, Driver Assessment and Appeal Division, provides information on various alternative transportation options to drivers who become unlicensed.

- 1. The Senior Mobility Work Group will investigate the possibility of replicating the Missouri rural public transportation marketing project.
- 2. Appropriate state departments (MDOT, DLEG, Human Services, and DCH) will work on reinitiating the Federal United We Ride human services transportation coordination effort.
- 3. DCH/Developmental Disability Council will continue to implement/evaluate the pilot voucher transportation program in 6 locations statewide.
- 4. The Senior Mobility Work Group will investigate piloting the Independent Transportation Network in an area of Michigan.

#### HOUSING AND LAND USE

# Goals and Issues:

1. Housing (i.e., home ownership assistance, shared living, independent senior living, and assisted senior living), community services and accessibility, and zoning and development review.

# Strategies:

- 1. 1995 Directory of Housing Resources for Older Adults (AAA 1-B)
- 2. Eastside Senior Citizen Center & Kearsley Daly Villa, Flint, MI
- 3. Land Use Tools and Techniques: A Handbook for Local communities (SEMCOG)
- 4. Removing Regulatory Barriers to Housing Options for the Elderly (Cornell University)
- 5. Create Walkable Communities

### Accomplishments:

- 1. The Michigan Vital Aging Think Tank was created and is supported by the MSU Extension, the DCH and MI Office of Services to the Aging.
- 2. The first Michigan Elder Friendly Community State Assembly was held in November 2005.

#### Near-term Action Plan:

1. MSU Extension, MDCH will pilot Elder Friendly Communities in the Gaylord Area and North Ottawa County and is looking at expanding to other areas.

### **LICENSING**

#### Goals and Issues:

- 1. Support efforts to develop effective screening tools.
- 2. Develop and disseminate educational materials to assist the legal community in identifying impairments.
- 3. Improve linkages between SOS branch offices and community and centralized resources.
- 4. Develop educational materials on elderly service options for distribution at SOS branch offices.

# Strategies:

- 1. Develop and disseminate educational materials to assist the legal community (law enforcement officers, attorneys, judges) in identifying driving impairments and referring impaired individuals to the proper resources.
- 2. Support efforts to develop effective screening tools.
- 3. Develop educational material, with Secretary of Sate coordinating with other agencies, identifying elderly service options for distribution at branch offices.

#### Accomplishments:

1. The Secretary of State branch offices offer free identification cards for those that voluntarily relinquish their driver's licenses due to physical or mental infirmities.

- 1. The Michigan Department of State will continue to utilize the mobile office to offer services to the senior population.
- 2. AAA-1B is working with Livingston County to develop and disseminate educational materials to assist the legal community (law enforcement officers, attorneys, judges) in identifying driving impairments and referring impaired individuals to the proper resources.

#### **ACRONYMS**

AAA American Automobile Association

AASHTO American Association of State Highway and Transportation Officials

CMAQ Congestion Mitigation and Air Quality

CPR Crash Process Redesign

EMS Emergency Management System FHWA Federal Highway Administration GIS Geographic Information System GPS Global Positioning System

GTSAC Governor's Traffic Safety Advisory Commission

ITE Institute of Transportation Engineers

LEAMS Law Enforcement Agency Management System

LTAP Local Technical Assistance Program

MDCH Michigan Department of Community Health

MDE Michigan Department of Education MDOS Michigan Department of State

MDOT Michigan Department of Transportation
MOHSP Michigan Office of Highway Safety Planning

MPO Metropolitan Planning Organization

MSU Michigan State University

NCHRP National Cooperative Highway Research Program

NHI National Highway Institute

NACEM North American Conference on Elderly Mobility

OHSP Office of Highway Safety Planning
OSA Office of Services to the Aging
PI&E Public Information and Education
PSA Public Service Announcement

RDIP AAA Road Demonstration Improvement Program SMART Southeast Michigan Area Regional Transportation

STP State Transportation Plan

TIA Traffic Improvement Association of Oakland County

TOPICS Traffic Operations Program to Increase Capacity and Safety

TSC Transportation Service Center

WSU Wayne State University

SDAP Senior Driver Awareness Program

# Acknowledgements

This document could not have been made possible without the guidance, planning, dedication and knowledge of the following individuals and their organizational support:

Jeff Bagdade AAA Michigan

Tom Bruff Southeastern Michigan Council of Governments Calvin Johnson Southeastern Michigan Council of Governments

Pamela Hall Office of Services to the Aging Sue Mynsberge Michigan Department of State

Kim Lariviere Michigan Department of Transportation Stuart Linsday Michigan Department of Transportation

Dick Miller AAA Michigan

Dave Morena Federal Highway Administration

Patricia CarrowMichigan Office of Highway Safety PlanningRobin PalmerMichigan Department of Community HealthFrank CardimenTraffic Improvement Assoc. of Oakland CountyJoan RichTraffic Improvement Assoc. of Oakland County

Frederick R. Deane, MD Michigan Senior Advocates Council

Tina Abbate Marzolf Area Agency on Aging 1-B

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